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IN THE UNITED STATES PATENT & TRADEMARK OFFICE

IN RE APPLICATION OF :
FUMIHIKO F.S. SATO : EXAMINER: PARKER, B.
SERIAL NO: 10/670,283 :
FILED: SEPTEMBER 26, 2003 : GROUP ART UNIT: 2174
FOR: USER INTERFACE APPARATUS :

REPLACEMENT APPEAL BRIEF

COMMISSIONER FOR PATENTS
ALEXANDRIA, VIRGINIA 22313

SIR:

This is a Replacement Appeal Brief in response to the Notification of Non-Compliant Appeal Brief dated May 6, 2008 and of the Final Rejection dated July 27, 2007, which finally rejected Claims 17 and 18 in the above-identified patent application.

I. Real Party in Interest

The real party in interest for this Appeal in the present application is the Assignee, RICOH COMPANY, LTD.

II. Related Appeals and Interferences

To the best of Appellant's knowledge there are no other appeals or interferences which will directly affect or be directly affected by, or have a bearing on, the Board's decision in this appeal.

III. Status of Claims

Claims 17 and 18 are pending in this application and are being appealed. Claims 17 and 18 were rejected in the outstanding Final Action, hereinafter "FA." Claims 1-16 were previously canceled without prejudice or disclaimer.

IV. Status of Amendments

There are no outstanding Amendments filed after the FA. A Request for Reconsideration was filed on October 5, 2007, and the advisory Action of October 18, 2007, indicated that this Request was considered but not found persuasive as to overcoming the outstanding rejection.

V. Summary of Claimed Subject Matter¹

The invention of Claim 17 is directed to a user interface system that will display an operation menu and transfer contents of this operation menu based on an operation input received in response to the operation menu being selected.

As explained at page 6, lines 25-30, for example, a plurality of software objects 100 within the user interface are provided as shown in FIG. 3. Included are the objects of View_Spec 101, Operation_Flow 102, Menu 103, Widget 104, Transition 105, Widget_Control 106, Select_Control 107, Input_Control 108, Cancel_Control 109, Decision_Control 110, User_Operation 111, Procedure 112, Display_Area 113, Control_Spec 114, Model_Spec 115, and Model 116. The relationship between the respective objects is as shown in FIG. 4. As further explained at page 7, lines 17-25, with further reference to FIG.

¹ It is Appellants' understanding that, under the rules of Practice before the Board of Patent Appeals and Interferences, 37 CFR §41.37(c) requires that a concise explanation of the subject matter recited in each independent claim be provided with reference to the specification by page and line numbers and to the drawings by reference characters. However, Appellants' compliance with such requirements anywhere in this document should in no way be interpreted as limiting the scope of the invention recited in all pending claims, but simply as non-limiting examples thereof.

3, for example, at the time of initializing the system, the View_Spec object 101 respectively creates the respective objects of the Operation_Flow 102, the Menu 103, the Widget 104, and the Transition object 105 and correlates the respective objects in accordance with the number of the menu for constructing the menu flow and the structure of transferring between the menus, both of which are previously determined. When the user performs a selection and provides a corresponding operation input in terms of the operation menu being selected, the object of Widget_Control 106 gives an order of operation to either one of the Select_Control 107, the Input_Control 108, the Cancel_Control 109, the Decision_Control 110 in order to perform any of the operations of corresponding selection, inputting, canceling, and determining.

The processor (CPU 2 of FIG. 1) that controls the entire apparatus (page 5, line3) thus executes a process requirement corresponding to the operation input, the above noted group of independent software objects providing the display of the operation menu and the transfer of its contents in response to it being selected.

While the language of “selection, inputting, canceling, and determining” is noted above, page 7, lines 26-31 make it clear how the claimed operation software object separate from the menu flow software object functions in cooperation with the menu flow software object to control processing of the operation input by the processor to “create, change, and delete the input operation” in terms of when the operation of selecting/inputting is done, the User_Operation object 111 is “created” and the content thereof is stored in memory. When the operation of “canceling” is performed, the User_Operation object 111 is eliminated, and thereby, the “cancellation” of the operation is performed. Furthermore, when the operation of determining is done, the Procedure object 112 “changes” the system information as the procedure of the operation for the user to treat the collection of the User_Operation object 111.

As further described at page 8, lines 1-4, for example,:

In such way, according to the embodiment of the present invention, the software objects 100 in the circumference of the user interface is divided into menu flow objects and operation objects, and thereby, the operational control step can be divided into the control of the menu displaying construction and the control of the operation input.

Page 8, lines 14- 18, for example, further explain the benefit of the present invention in terms of “the operation objects” being separated into “the operation information memorizing objects for memorizing the contents of the operation and the operation controlling objects for registering/changing/deleting, the change of the system information by the user's can be treated with a common method that does not depend on the particular type of system information.”

Claim 18, only differs from Claim 17 as to specifying the user interface to be part of an image forming apparatus as described relative to FIG. 1 at page 4, lines 22-26, for example. Nonetheless, in view of the Notice of Non-Compliant Appeal Brief, the features of Claim 18 are separately outlined below, referring to substantially the same portions of the specification and drawings as referenced in relation to the similar features recited in independent Claim 17.

As explained at page 6, lines 25-30, for example, a plurality of software objects 100 within the user interface are provided as shown in FIG. 3. Included are the objects of View_Spec 101, Operation_Flow 102, Menu 103, Widget 104, Transition 105, Widget_Control 106, Select_Control 107, Input_Control 108, Cancel_Control 109, Decision_Control 110, User_Operation 111, Procedure 112, Display_Area 113, Control_Spec 114, Model_Spec 115, and Model 116. The relationship between the respective objects is as shown in FIG. 4. As further explained at page 7, lines 17-25, with further reference to FIG. 3, for example, at the time of initializing the system, the View_Spec object 101 respectively creates the respective objects of the Operation_Flow 102, the Menu 103, the Widget 104, and

the Transition object 105 and correlates the respective objects in accordance with the number of the menu for constructing the menu flow and the structure of transferring between the menus, both of which are previously determined. When the user performs a selection and provides a corresponding operation input in terms of the operation menu being selected, the object of Widget_Control 106 gives an order of operation to either one of the Select_Control 107, the Input_Control 108, the Cancel_Control 109, the Decision_Control 110 in order to perform any of the operations of corresponding selection, inputting, canceling, and determining.

The processor (CPU 2 of FIG. 1) that controls the entire apparatus (page 5, line 3) thus executes a process requirement corresponding to the operation input, the above noted group of independent software objects providing the display of the operation menu and the transfer of its contents in response to it being selected.

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VI. Rejection To Be Reviewed On Appeal

The rejection to be reviewed on appeal is that of Claims 17 and 18 as being anticipated by Bertram et al. (U.S. Patent No. 5,818,446, hereinafter Bertram ‘446) under 35 U.S.C. §102(b).

VII. Argument

The Rejection of Claim 17 under 35 U.S.C. §102(b)

With regard to the user interface system recited in Claim 17, it is noted that the outstanding FA includes inappropriate reliance on Claim 1 of Bertram ‘446 at page 2 as to “transferring contents of said operation menu based on operation input received (i.e. content received) in response to the operation menu being selected (i.e. selecting a predetermined user interface), comprising: (loading/transferring Bertram Claim 1).” However, it is well settled that patent claims serve an entirely different purpose from the technical disclosure, and cannot be substituted for such technical disclosure. See *In re Benno*, 226 USPQ 683 (Fed. Cir. 1985) (“The scope of a patent's claims determines what infringes the patent; it is no measure of what it discloses.”).

Claims 17 requires the claimed user interface system to display an operation menu and to transfer contents of this displayed operation menu “based on an operation input received in response to the operation menu being selected.” On the other hand, the recitation of Claim 1 of Bertram ‘446 merely suggests detecting that a user interface presentation format change is desired to a new user interface presentation format that is then loaded into memory for use by a processor in displaying this new user interface. There is nothing here teaching the required contents transfer of a displayed menu and no such transfer “based on an operation input received in response to the operation menu being selected.” Instead of this transfer of a displayed menu “based on an operation input received in response to the operation menu being selected,” the teaching of Bertram ‘446 is to switch to a different user interface based on particular data content being received, see FIG. 4 A, for example. Also the user can request a change as in FIG. 4B.

In particular, the Bertram ‘446 Claim 1 “loading/transferring” relied on in the outstanding Action appears to be disclosed at col. 7, lines 26-35, as follows:

In the invention, any user interface is changed by simply removing the currently active user interface and control code being executed in the processor and replacing it with a new user interface and control code without affecting the data being displayed. The user interface can be switched automatically in response to the receipt of a communicated desire to change the interface based on data content or format or it can be switched by the specific request of the user.

As further taught at col. 7, lines 36-44, of Bertram ‘446:

Automated user interface changes are implemented in the invention by providing software routines to respond to changes in data content or format from a data source such as a host, a server or a received URL content from a browser. To enable this function, each user interface is registered with a user interface selection control facility provided by the invention which is configured to detect changes in received content which correlate with factors that are associated with given user interfaces.

Thus, to the extent that Bertram ‘446 teaches that contents of an “operation menu” being transferred “based on an operation input received in response to the operation menu

being selected,” it is relative to the user interface change control facility selecting the new user interface in response to the above-noted automatic detection or in response to the above-noted user selection by having the new user interface (newly loaded or already loaded) replace the presently running user interface. This received new content transition or the user requested interface change transition is not seen to be reasonably readable on the language of Claim 17 that requires displaying an operation menu and transferring contents of this displayed operation menu (not other data contents) based on an operation input received in response to the operation menu being selected (not receipt of an interface change instruction itself).

Also Claim 17 recites that the claimed processor must “execute a process requirement corresponding to the operation input.” The FA again improperly turns to a claim limitation (this time Claim 6) as to this requirement of Claim 17 instead of turning to the technical disclosure of Bertram ‘446 as required by *In re Benno, supra*. Moreover, the subject matter related to Claim 6 is that of a browser that will control a processor for changing interfaces, not the claimed execution of “a process requirement corresponding to the operation input,” which input is received in response to the operation menu being selected.

Claim 17 further requires there to be “a group of independent software objects” that are “to display the operation menu and to transfer the contents of the operation menu in response to the operation menu being selected,” with this transfer of the contents of the operation menu being controlled by “a menu flow software object,” while control of “processing of the operation input by the processor to create, change, and delete the input operation” is provided by “an operation software object separate from the menu flow software object” that functions “in cooperation with the menu flow software object to provide this “control.”

The FA (at the top of page 3) references Claim 1 and the Abstract of Bertram'446 as teaching the claimed "group of independent software objects" that are "to display the operation menu and to transfer the contents of the operation menu in response to the operation menu being selected" in a manner suggesting reliance on the above-noted user interface change control facility operating with the software routines for the automated response noted at col. 7, lines 35-44.

The problem is that this automated interface change control facility operating with the software routines that automatically select the new user interface in response to an automatic detection to transfer contents only include selection software as to "file type" (box 71 of FIG. 4A), "content type" (box 72 of FIG. 4A), "data object" (box 73 of FIG. 4A), or "file name" (box 74 of FIG. 4A), and these software routines are not disclosed to cooperate with any other programs to control processing of the operation input by the processor so as to "create, change, and delete the input operation." Nothing in the general stated result of col. 7, lines 8-10, as to switching "to a different user interface based on a content transition" changes this disclosure of such automated switching.

Moreover, to whatever extent that Bertram'446 teaches the later processing box 79 of FIG. 4B is used to suspend the currently active user interface, there is no teaching or suggestion of this processing in box 79 to be found in Bertram'446 as to this suspension of the active user interface cooperating with any of the automated selections of boxes 71-74 at all, much less so as to "create, change, and delete the input operation" as Claim 17 requires. Instead, this suspension is done at "an appropriate point in its operation from which it can be resumed" (col.10, lines 59-62). This resumption is shown as box 83 of FIG. 4B and is explained in the example set forth in col. 11, lines 38-44 as follows:

From this point, the screen of the display appears as shown in FIG. 2. When the child begins to use the computer, and will interact with that interface 3 until done. When the child does leave the computer, the parent may type the key sequence for switching back to the standard user interface or, if provided,

could click on an icon for returning automatically to the standard user interface.

Clearly, the suspended interface is not what is passed as the queued contents and the new user interface 3 is maintained until the new user completes their new use. Thus, suspended interface 2 does not “function with the control facility” and does not determine any thing as to contents to pass anywhere as it is not reactivated until after it is switched back to active from suspended. See col. 3, lines 49- 60 that further explain that “contents” relate to the received URL data contents that are displayed on a separate data display area apart from the user inter face display. These are clearly the content referred to by box 85, not any part of the suspended user interface.

That being the case, the attempted reading of the Claim 17 “operation software object separate from the menu flow software object and functioning in cooperation with the menu flow software object to control processing of the operation input by the processor and to create, change, and delete the input operation” on “79, suspended interface and Fig. 4B” at page 3 of the FA is clearly without merit. Also without merit is the contention at page 4 of the FA that there is a disclosure by Bertram’446 as to a passing of the content requests (not contents as urged at page 4) to the new interface (via 85, 86) that results in cooperation between the suspended interface and the selection control facility. All that Bertram’446 teaches as to the passed content request is that it is displayed, as noted above and below, not that the asserted cooperation with either the suspended interface or the selection control facility occurs. See col. 9, lines 30- 36 noting that:

All of the outstanding requested content which may be pending URL requests for the currently active user interface should be held in a queue during the transition to the new user interface. After the new user interface is activated, the queued requests may be passed to the new user interface for display.

Page 4 , lines 3-6, of the FA make reference to col. 7, lines 54-57, as somehow supporting the PTO interpretations that the passing of the queued content requests to the new interface requires the suspended interface (interpreted to be the operation software objects) to be functioning with the selection control facility. Instead, col. 7, lines 54-57, simply indicate that selecting a user's homepage can result in the homepage display along with a display of the user's interface. Selecting a homepage is not an operation that can be read on the actually taught "queued requests may be passed to the new user interface for display."

Thus, the outstanding Action violates precedent because the arrangement of Claim 17 requires a "menu flow software object configured to control the transfer of the contents of the operation menu" with the above-noted Claim 17 "operation software object separate from the menu flow software object and functioning in cooperation with the menu flow software object to control processing of the operation input by the processor and to create, change, and delete the input operation" to thus manage the operation input." As noted above, there is no teaching or suggestion to be found in Bertram '446 that the software process of FIGS 4A and 4B create a new interface that cooperates with a suspended interface, much less cooperation with the selection control facility to control any processor processing, much less the required control "to create, change, and delete the input operation."

The Rejection of Claim 18 under 35 U.S.C. §102(b)

As noted above, the only difference between Claims 17 and 18 is that Claim 18 recites that it is an image forming apparatus that includes the user interface system that is recited as also being the subject matter of Claim 17. Therefore, the arguments presented below are substantially the same as those present above with respect to independent Claim 17.

With regard to the image forming apparatus including a user interface system recited in Claim 18, it is noted that the outstanding FA includes inappropriate reliance on Claim 1 of

Bertram '446 at page 2 as to "transferring contents of said operation menu based on operation input received (i.e. content received) in response to the operation menu being selected (i.e. selecting a predetermined user interface), comprising: (loading/transferring Bertram Claim 1)." However, it is well settled that patent claims serve an entirely different purpose from the technical disclosure, and cannot be substituted for such technical disclosure. See *In re Benno*, 226 USPQ 683 (Fed. Cir. 1985) ("The scope of a patent's claims determines what infringes the patent; it is no measure of what it discloses.").

Claims 18 requires the claimed user interface system to display an operation menu and to transfer contents of this displayed operation menu "based on an operation input received in response to the operation menu being selected." On the other hand, the recitation of Claim 1 of Bertram '446 merely suggests detecting that a user interface presentation format change is desired to a new user interface presentation format that is then loaded into memory for use by a processor in displaying this new user interface. There is nothing here teaching the required contents transfer of a displayed menu and no such transfer "based on an operation input received in response to the operation menu being selected." Instead of this transfer of a displayed menu "based on an operation input received in response to the operation menu being selected," the teaching of Bertram '446 is to switch to a different user interface based on particular data content being received, see FIG. 4 A, for example. Also the user can request a change as in FIG. 4B.

In particular, the Bertram '446 Claim 1 "loading/transferring" relied on in the outstanding Action appears to be disclosed at col. 7, lines 26-35, as follows:

In the invention, any user interface is changed by simply removing the currently active user interface and control code being executed in the processor and replacing it with a new user interface and control code without affecting the data being displayed. The user interface can be switched automatically in response to the receipt of a communicated desire to change the interface based on data content or format or it can be switched by the specific request of the user.

As further taught at col. 7, lines 36-44, of Bertram '446:

Automated user interface changes are implemented in the invention by providing software routines to respond to changes in data content or format from a data source such as a host, a server or a received URL content from a browser. To enable this function, each user interface is registered with a user interface selection control facility provided by the invention which is configured to detect changes in received content which correlate with factors that are associated with given user interfaces.

Thus, to the extent that Bertram '446 teaches that contents of an "operation menu" being transferred "based on an operation input received in response to the operation menu being selected," it is relative to the user interface change control facility selecting the new user interface in response to the above-noted automatic detection or in response to the above-noted user selection by having the new user interface (newly loaded or already loaded) replace the presently running user interface. This received new content transition or the user requested interface change transition is not seen to be reasonably readable on the language of Claim 18 that requires displaying an operation menu and transferring contents of this displayed operation menu (not other data contents) based on an operation input received in response to the operation menu being selected (not receipt of an interface change instruction itself).

Also, Claim 18 recites that the claimed processor must "execute a process requirement corresponding to the operation input." The FA again improperly turns to a claim limitation (this time Claim 6) as to this requirement of Claim 18 instead of turning to the technical disclosure of Bertram '446 as required by *In re Benno, supra*. Moreover, the subject matter related to Claim 6 is that of a browser that will control a processor for changing interfaces, not the claimed execution of "a process requirement corresponding to the operation input," which input is received in response to the operation menu being selected.

Claim 18 further requires there to be “a group of independent software objects” that are “to display the operation menu and to transfer the contents of the operation menu in response to the operation menu being selected,” with this transfer of the contents of the operation menu being controlled by “a menu flow software object,” while control of “processing of the operation input by the processor to create, change, and delete the input operation” is provided by “an operation software object separate from the menu flow software object” that functions “in cooperation with the menu flow software object to provide this “control.”

The FA (at the top of page 3) references Claim 1 and the Abstract of Bertram ‘446 as teaching the claimed “group of independent software objects” that are “to display the operation menu and to transfer the contents of the operation menu in response to the operation menu being selected” in a manner suggesting reliance on the above-noted user interface change control facility operating with the software routines for the automated response noted at col. 7, lines 35-44.

The problem is that this automated interface change control facility operating with the software routines that automatically select the new user interface in response to an automatic detection to transfer contents only include selection software as to “file type” (box 71 of FIG. 4A), “content type” (box 72 of FIG. 4A), “data object” (box 73 of FIG. 4A), or “file name” (box 74 of FIG. 4A), and these software routines are not disclosed to cooperate with any other programs to control processing of the operation input by the processor so as to “create, change, and delete the input operation.” Nothing in the general stated result of col. 7, lines 8-10, as to switching “to a different user interface based on a content transition” changes this disclosure of such automated switching.

Moreover, to whatever extent that Bertram ‘446 teaches the later processing box 79 of FIG. 4B is used to suspend the currently active user interface, there is no teaching or

suggestion of this processing in box 79 to be found in Bertram '446 as to this suspension of the active user interface cooperating with any of the automated selections of boxes 71-74 at all, much less so as to "create, change, and delete the input operation" as Claim 18 requires. Instead, this suspension is done at "an appropriate point in its operation from which it can be resumed" (col. 10, lines 59-62). This resumption is shown as box 83 of FIG. 4B and is explained in the example set forth in col. 11, lines 38-44 as follows:

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Clearly, the suspended interface is not what is passed as the queued contents and the new user interface 3 is maintained until the new user completes their new use. Thus, suspended interface 2 does not "function with the control facility" and does not determine any thing as to contents to pass anywhere as it is not reactivated until after it is switched back to active from suspended. See col. 3, lines 49- 60 that further explain that "contents" relate to the received URL data contents that are displayed on a separate data display area apart from the user inter face display. These are clearly the content referred to by box 85, not any part of the suspended user interface.

That being the case, the attempted reading of the Claim 18 "operation software object separate from the menu flow software object and functioning in cooperation with the menu flow software object to control processing of the operation input by the processor and to create, change, and delete the input operation" on "79, suspended interface and Fig. 4B" at page 3 of the FA is clearly without merit. Also without merit is the contention at page 4 of the FA that there is a disclosure by Bertram '446 as to a passing of the content requests (not contents as urged at page 4) to the new interface (via 85, 86) that results in cooperation

between the suspended interface and the selection control facility. All that Bertram '446 teaches as to the passed content request is that it is displayed, as noted above and below, not that the asserted cooperation with either the suspended interface or the selection control facility occurs. See col. 9, lines 30- 36 noting that:

All of the outstanding requested content which may be pending URL requests for the currently active user interface should be held in a queue during the transition to the new user interface. After the new user interface is activated, the queued requests may be passed to the new user interface for display.

Page 4 , lines 3-6, of the FA make reference to col. 7, lines 54-57, as somehow supporting the PTO interpretations that the passing of the queued content requests to the new interface requires the suspended interface (interpreted to be the operation software objects) to be functioning with the selection control facility. Instead, col. 7, lines 54-57, simply indicate that selecting a user's homepage can result in the homepage display along with a display of the user's interface. Selecting a homepage is not an operation that can be read on the actually taught "queued requests may be passed to the new user interface for display."

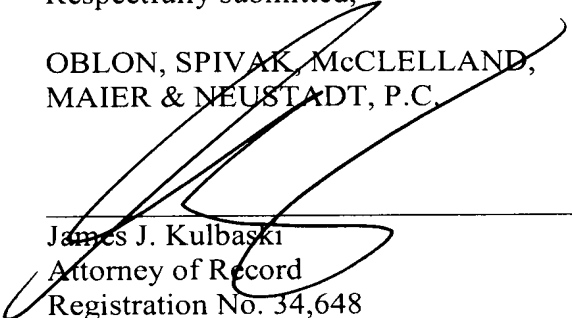
Thus, the outstanding Action violates precedent because the arrangement of Claim 18 requires a "menu flow software object configured to control the transfer of the contents of the operation menu" with the above-noted Claim 18 "operation software object separate from the menu flow software object and functioning in cooperation with the menu flow software object to control processing of the operation input by the processor and to create, change, and delete the input operation" to thus manage the operation input." As noted above, there is no teaching or suggestion to be found in Bertram '446 that the software process of FIGS 4A and 4B create a new interface that cooperates with a suspended interface, much less cooperation with the selection control facility to control any processor processing, much less the required control "to create, change, and delete the input operation."

IX. Conclusion

In view of above remarks, Appellant respectfully submits that the outstanding rejection of Claims 17 and 18 as being anticipated by Bertram '446 under 35 U.S.C. §102(b) must be reversed for all the above-noted reasons.

Respectfully submitted,

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CLAIMS APPENDIX

Claim 17: A user interface system, for displaying an operation menu and transferring contents of said operation menu based on an operation input received in response to the operation menu being selected, comprising:

a processor configured to execute a process requirement corresponding to the operation input;

a group of independent software objects configured to display the operation menu and to transfer the contents of said operation menu in response to the operation menu being selected, said group of independent software objects including:

a menu flow software object configured to control the transfer of the contents of the operation menu; and

an operation software object separate from the menu flow software object and functioning in cooperation with the menu flow software object to control processing of the operation input by the processor and to create, change, and delete the input operation.

Claim 18: An image forming apparatus including a user interface system for displaying an operation menu and transferring contents of said operation menu based on an operation input received in response to the operation menu being selected, the user interface system further comprising:

a processor configured to execute a process requirement corresponding to the operation input;

a group of independent software objects configured to display the operation menu and to transfer the contents of said operation menu in response to the operation menu being selected, said group of independent software objects including:

a menu flow software object configured to control the transfer of the contents of the operation menu; and

an operation software object separate from the menu flow software object and functioning in cooperation with the menu flow software object to control processing of the operation input by the processor and to create, change, and delete the input operation.

EVIDENCE APPENDIX

None.

RELATED PRECEDINGS APPENDIX

None.